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ABSTRACT

The New Jersey Occupational Information Coordinating Committee's statistics for average annual predicted job openings for program year 1989 are given in this report, along with the New Jersey Division of Vocational Education completers' statistics for the 1988-89 school year. The numbers of male and female completers of secondary programs for each of the 29 job categories studied is also presented. From this information, comparisons are made of male/female completers. (For this report, a nontraditional program for women is defined as one in which most of the participants are men and a nontraditional program for men is the opposite.) Further comparisons are made of the total numbers of people trained at the secondary, postsecondary, and proprietary school levels and the predicted annual job openings. Job categories presented are automotive body repair, automotive mechanic, bank clerk, bookkeeping and accounting, building maintenance, cabinetmaking and furniture making, carpentry, child care worker, clothing manufacturing, commercial art, computer operator, computer programming, cosmetology, data entry keyer, drafting and design, electrical and electronic technology, electrical equipment repair, electrician, food marketing, food service, graphic arts, health aide, heating and cooling mechanic, licensed practical nurse, machinist, office occupations, plumbing, sales and purchasing, and welding. No significant changes are reported in nontraditional completions, indicating that strong stereotypes still exist in most fields. (KC)

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ED326634

STATUS REPORT ON FEMALE COMPLETERS IN NEW JERSEY VOCATIONAL EDUCATION

1990

Developed by:

Life Skills Center
Department of Home Economics
School of Professional Studies
Montclair State College
Upper Montclair, New Jersey 07043

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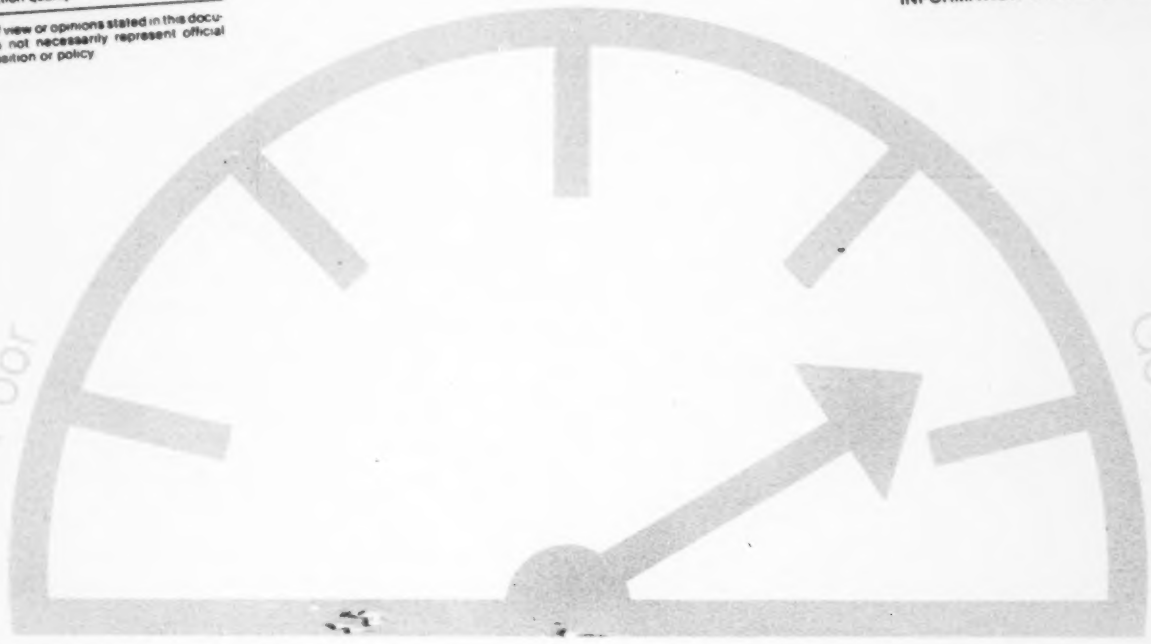

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New Jersey State Department of Education
Division of Vocational Education
Dr. Lloyd J. Newbaker, Jr. Assistant Commissioner

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Joan D. Bernstein, Project Director
Joanne F. Coté-Bonanno, Principal Investigator

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Introduction

The New Jersey Department of Education is committed to ensuring equal access for all students to vocational education programs. Vocational educators are challenged to remove the barriers of sex bias and stereotyping which have prevented female participation in nontraditional vocational opportunities. There have been some changes toward elimination of sex role stereotyping as evidenced by New Jersey's vocational program completers (secondary) figures. This report will indicate the areas where change is evident.

This report presents average annual predicted job opening statistics for the program year 1989 compiled by the New Jersey Occupational Information Coordinating Committee (NJOICC). In addition, the New Jersey Division of Vocational Education completers statistics for the 1988-89 school year are also included. The number of male and female completers in secondary programs for each job category is given. Gender completer figures are available only from secondary institutions through the New Jersey Department of Education, Division of Vocational Education. From this information, comparisons are made of male/female completers. For this report a nontraditional program for females is defined as one in which most of the participants are male and a nontraditional program for males is one in which most of the participants are female. Comparisons are also shown of the total number of people trained at the secondary, post secondary and proprietary school levels as contrasted with the predicted annual job openings.

Job Outlook ratings were determined by using the program year annual occupational supply/demand analysis organized by the Occupational Information System (OIS). This information compares the expected number of openings in a group of occupational job titles to the anticipated supply coming from a group of occupational job training programs. The OIS supply/demand data are ranked from highest to lowest in a ratio of program completers to average annual job openings. Ranking these supply/demand ratios gives an indication of potential employment opportunities.

The job outlook is a key factor in determining vocational programs for women. Only on that basis can women be encouraged to participate in preparation for nontraditional employment. All students should be encouraged to explore and enroll in those training programs which offer the best employment prospects.

Women in the Labor Force

Recent statistics show that women's participation in the labor force has been steadily increasing. United States Department of Labor statistics reveal that over 52% of the female adult population is in the work force. Working for "pin money" is a myth that may persist, but women work for the same reasons that men do: economic necessity, support for themselves and their families, and financial independence.

Unfortunately, wage disparity between male and female workers still significantly favors men. Women earn only 64% of men's wages for performing identical tasks. While sex discrimination in hiring has declined, most women continue to enter stereotypical "female occupations", positions which are often low status, low paying and lacking in advancement opportunities.

The majority of women in the labor force are married and have children. Changing family patterns of female-headed households, the increase in divorce, and marriage at a later age contribute to the numbers of women seeking employment. Most women do not have the financial resources or skills to support themselves and their children. The traditional homemaker, who has worked at home and cared for her family, but now is entering or re-entering the labor force after many years, has the greatest difficulty securing appropriate work.

Despite some movement into professional and managerial jobs, most employed women maintaining families have tended to remain in the generally low paying or less skilled jobs. Like most employed women, the largest proportion of those maintaining families are in administrative support jobs, including clerical work. Secretarial work is still the largest occupational area for women, just as it was in the past.

With vocational training, a woman is more capable of obtaining employment that will lead to financial security and economic independence. The vocational curriculum can provide equity of educational opportunity for women who need to be trained in nontraditional occupational areas in order to ensure upward mobility.

Presentation of Data

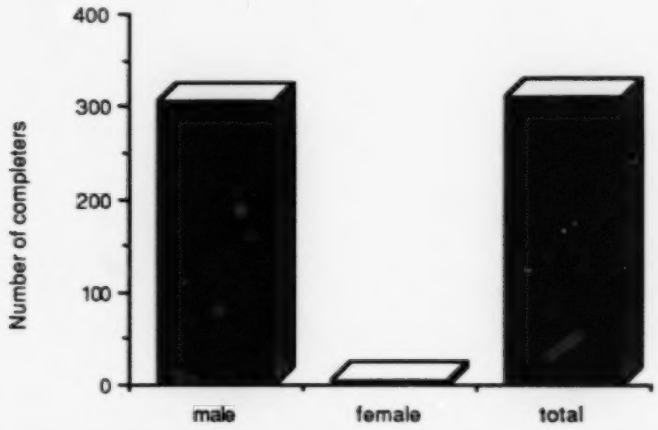
This report is an analysis of New Jersey Vocational Education programs illustrating male/female student completer figures for the 1988-89 school year and New Jersey Occupational Information Coordinating Committee (NJOICC) statistics on supply and demand for the program year 1989.

Each graph represents a specific training category identified by the NJOICC as one of the top 20 job categories for which most secondary students are being trained and/or for the highest number of predicted job openings in New Jersey. The bar graphs present data on male/female vocational program completers (secondary) based on the Division of Vocational Education figures. This preliminary review of data, shows little change in the participation of females in training programs for traditionally male occupations. Also there is no significant increase in the number of male completers in training programs that have been historically female dominated.

This report also compares New Jersey Vocational Education completer figures with NJOICC statistics on job openings for 1989. This comparison helps determine the extent to which vocational training in various occupational categories is keeping pace with predicted job availability in various occupational categories.

AUTOMOTIVE BODY REPAIR

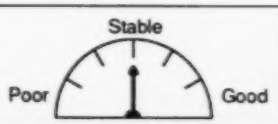
Automotive Body Repair programs prepare individuals to repair automobile body parts using automotive hand and power tools. Frame straightening, engine and transmission removal and replacement techniques are also taught.



New Jersey Secondary Vocational Education Completers 1988-1989

In the school year 1988-1989, the total number of secondary school completers in Vocational Education Automotive Body Repair programs was 310. Of these completers, 98% were males and 2% were females. The very high percentage of male completers may be attributed to the tradition of primarily employing men in this occupation.

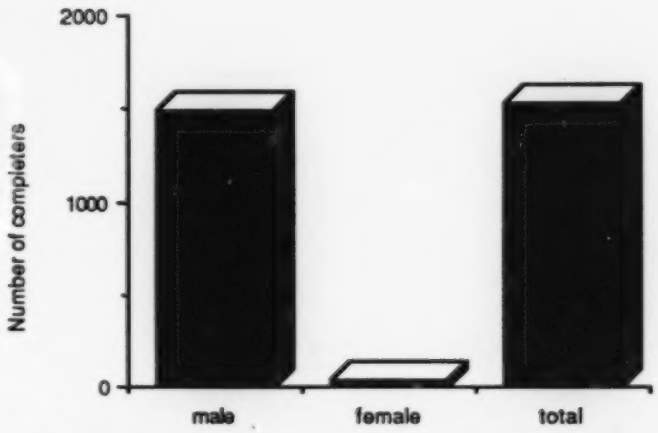
Job Outlook



New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 330 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 330 Automotive Body Repair completers for the program year 1989. Some of the occupational positions included in this category are: automotive body and related repairers, and transportation equipment painters. Predicted job openings are at par with the number of current trainee completers for positions in this occupational category.

AUTOMOTIVE MECHANIC

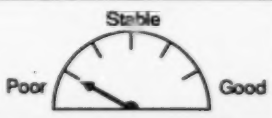
Automotive Mechanic programs prepare individuals to repair and overhaul automobiles, buses, trucks and other automotive vehicles. The Vocational Education programs included in this category are: agriculture mechanics, automotive technology, general vehicle mechanics, automotive mechanics and diesel engine mechanics.



New Jersey Secondary Vocational Education Completers 1988-1989

In the school year 1988-1989, the total number of secondary school completers in Vocational Education Automotive Mechanic programs was 1,535. Of these completers, 97% were males and 3% were females. The very high percentage of male completers may be attributed to the tradition of primarily employing men in this occupational category.

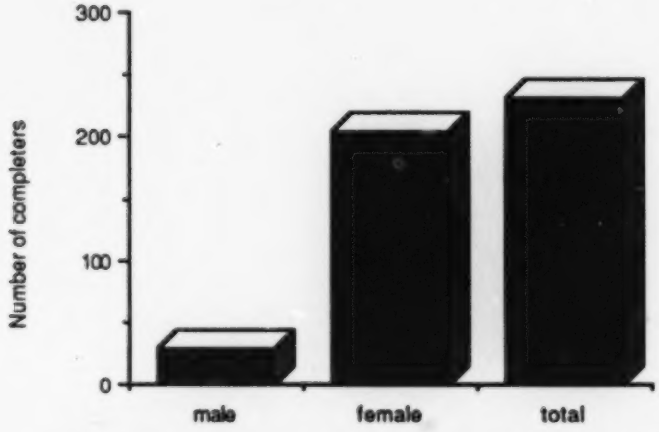
Job Outlook



New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 1,422 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 2,102 Automotive Mechanic trainee completers for the program year 1989. Some of the occupational positions included in this category are: automotive mechanics, bus and truck mechanics, diesel engine mechanics, farm equipment mechanics, electrical installers and repairers, and tire repairers and changers. Predicted job openings fall short of current trainee completers for positions in this occupational category.

BANK CLERK

Bank Clerk programs prepare individuals to process deposits and withdrawals for checking and savings accounts, cash checks, sell savings bonds, accept payment for customer utility bills and handle certificates of deposit. The Vocational Education programs included in this category are: banking, credit collection clerk, teller and transit clerk.



New Jersey Secondary Vocational Education Completers 1988-1989

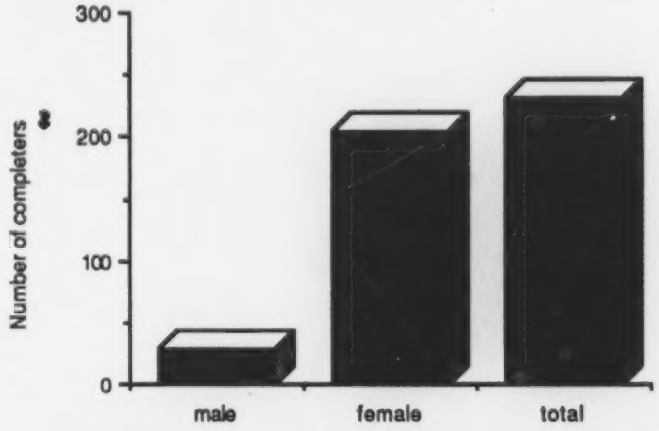
In the school year 1988-1989, the total number of secondary school completers in Vocational Education Bank Clerk programs was 232. Of these completers, 12% were males and 88% were females. The high percentage of female completers may be attributed to the tradition of primarily employing women in this occupational category.

Job Outlook

New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 1,650 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 253 Bank Clerk trainee completers for the program year 1989. Some of the occupational positions included in this category are: tellers, account clerks, transit clerks, loan interviewers, credit authorizers, credit checkers, loan/credit clerks and bill/account collectors. Predicted job openings far exceed the number of current trainee completers for positions in this occupational category.

BOOKKEEPING AND ACCOUNTING

Bookkeeping and Accounting programs prepare individuals to maintain systematic numerical records of accounts and business transactions in journals, ledgers, or computer systems to maintain complete financial records. The Vocational Education programs in this category include accounting, taxation, bookkeeping, computing, machine billing, and loan clerk.



New Jersey Secondary Vocational Education Completers 1988-1989

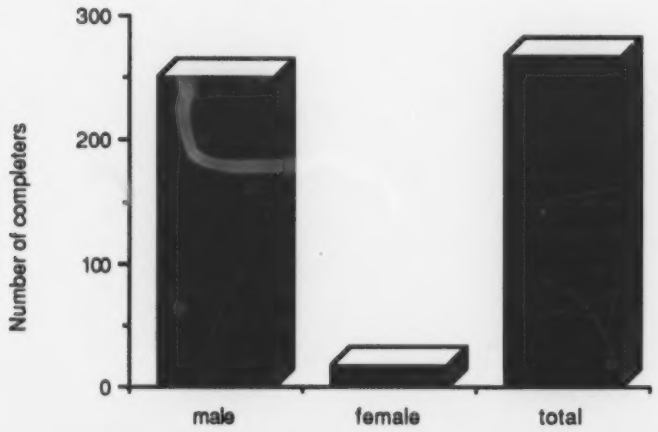
In the school year 1988-1989, the total number of secondary school completers in Vocational Education Bookkeeping and Accounting programs was 1,605. Of these completers, 44% were males and 56% were females. Although the percentage of female completers is higher than the male completers, the gender difference has been declining over the years. This could be due to the positions in this occupational category becoming more attractive to men than they have been in the past.

Job Outlook

New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 7,340 positions are available each year in this category. These same statistics including secondary, college and private vocational schools, also show a total of 3,519 Bookkeeping and Accounting trainee completers for the program year 1989. Predicted job openings are more than double the number of current trainee completers for positions in this occupational category.

BUILDING MAINTENANCE

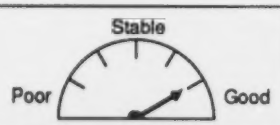
Building Maintenance programs prepare individuals to keep buildings and grounds in a clean and orderly condition, maintain equipment and utility systems and make structural repairs.



New Jersey Secondary Vocational Education Completers 1988-1989

In the school year 1988-1989, the total number of secondary school completers in Vocational Education Building Maintenance programs was 267. Of these completers, 94% were males and 6% were females. The very low percentage of female completers may be attributed to the tradition of generally employing men in this occupational category.

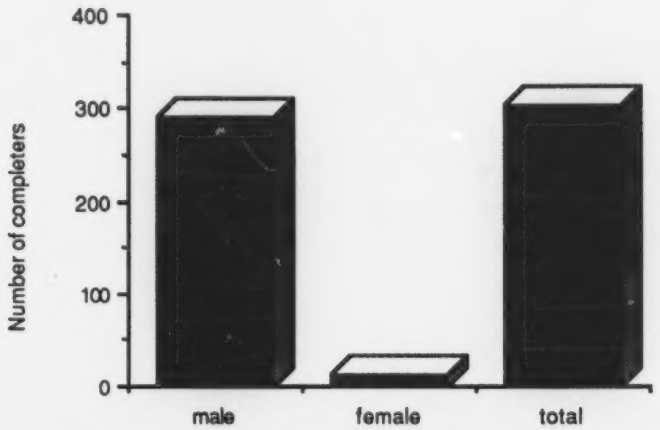
Job Outlook



New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 1,910 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of only 267 Building Maintenance trainee completers for the program year 1989. The occupational positions included in this category are: general utility machinery repairers, mobile home repairers, boiler operators/tenders and stationary engineers. Predicted job openings far exceed the number of current trainee completers for positions in this occupational category.

CABINETMAKING AND FURNITURE MAKING

Cabinet Making and Furniture Making programs prepare individuals to operate a variety of woodworking machines and tools to fabricate and repair wooden fixtures, cabinets and high-grade furniture. Some of the Vocational Education programs included in this category are: general woodworking, furniture making, millwork and cabinet making.



New Jersey Secondary Vocational Education Completers 1988-1989

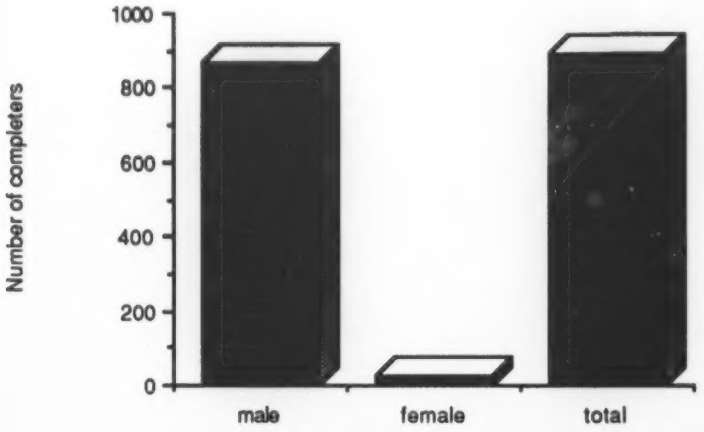
In the school year 1988-1989, the total number of secondary school completers in Vocational Education Cabinet Making and Furniture Making programs was 303. Of the completers, 96% were males and 4% were females. The higher percentage of males completing training in Cabinet Making and Furniture Making may be due to the tradition of generally employing men rather than women in this occupational category.

Job Outlook

New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 823 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 303 Cabinet Making and Furniture Making trainee completers for the program year 1989. The occupational positions included in this category are: wood pattern and model makers, wood machinists, cabinet makers/ bench carpenters, furniture finishers, and all other precision woodworkers, assemblers and fabricators. Predicted job openings exceed the number of current trainee completers for positions in this occupational category.

CARPENTRY

Carpentry programs prepare individuals to read blueprints, and construct, install and repair structures using material such as wood, plastics, fiberglass and drywall.



New Jersey Secondary Vocational Education Completers 1988-1989

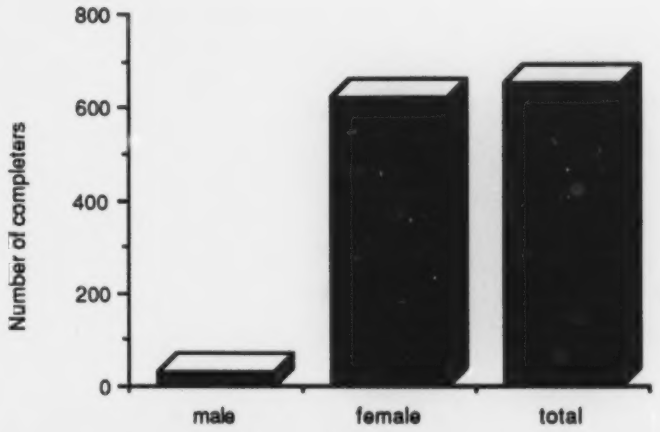
In the school year 1988-1989, the total number of secondary school completers in Vocational Education Carpentry programs was 892. Of these completers, 97% were males and 3% were females. The very high percentage of male completers may be attributed to the tradition of primarily employing men in this occupational category.

Job Outlook

New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 1,040 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 892 Carpentry trainee completers for the program year 1989. Some of the occupational positions included in this category are: carpenters and related helpers and ceiling tile installers. Predicted job openings slightly exceed the number of current trainee completers for positions in this occupational category.

CHILD CARE WORKER

Child Care Worker programs prepare individuals to assist teachers in programs designed to meet the physical, social, intellectual and emotional needs of young children. The Vocational Education programs included in this category are: general child care and guidance, child care aide, child care management, foster care/family care and therapeutic recreation aide.



New Jersey Secondary Vocational Education Completers 1988-1989

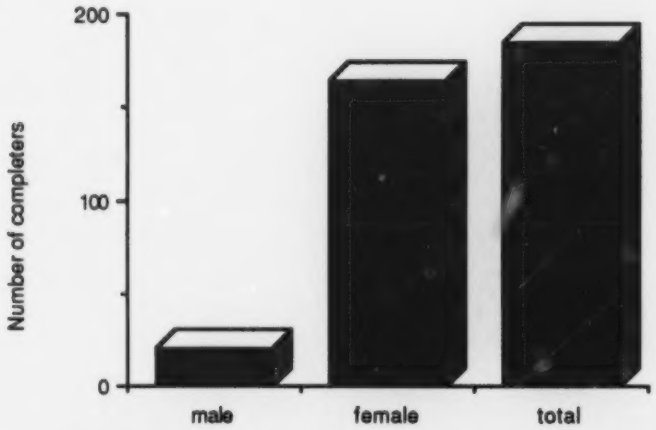
In the school year 1988-1989, the total number of secondary school completers in Vocational Education Child Care Service programs was 652. Of these completers, 5% were males and 95% were females. The very low percentage of male completers may be attributed to the tradition of generally employing women in this occupational category.

Job Outlook

New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 1,940 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 680 Child Care Worker trainee completers for the program year 1989. Predicted job openings far exceed the number of current trainee completers for positions in this occupational category.

CLOTHING MANUFACTURING

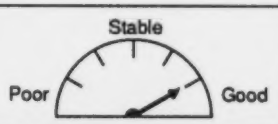
Clothing Manufacturing programs prepare individuals to work in garment and apparel design, construction, tailoring, alteration and other aspects of the clothing industry. The Vocational Education programs in this category are: clothing, apparel and textiles and commercial garment construction.



New Jersey Secondary Vocational Education Completers 1988-1989

In the school year 1988-1989, the total number of secondary school completers in Vocational Education Clothing Manufacturing programs was 185. Of these completers, 11% were males and 89% were females. The high percentage of female completers may be attributed to the tradition of primarily employing women in this occupational category.

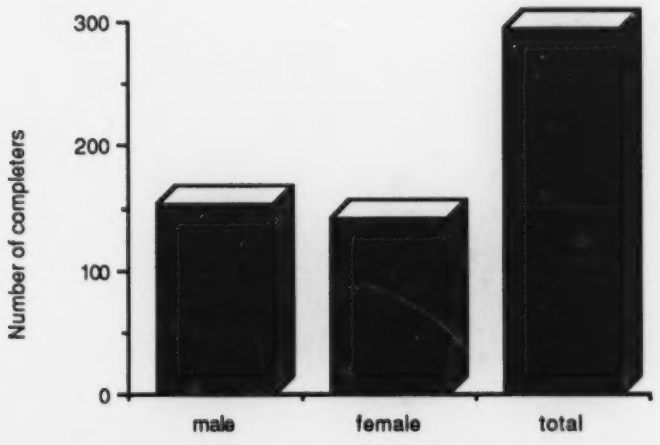
Job Outlook



New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 1,563 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of only 185 Clothing Manufacturing trainee completers for the program year 1989. Some of occupational positions included in this category are: fabric pattern makers and layout workers, textile machine setters, set-up operators and tenders, and garment sewing machine operators. Predicted job openings far exceed the number of current trainee completers for positions in this occupational category.

COMMERCIAL ART

Commercial Art programs prepare individuals to illustrate and design in pen/ink, charcoal and pastels and to use lettering, photography and printing techniques for commercial use. The Vocational Education programs included in this category are: photography, photo typesetting, computer graphics, photographic retouching and color separation.



New Jersey Secondary Vocational Education Completers 1988-1989

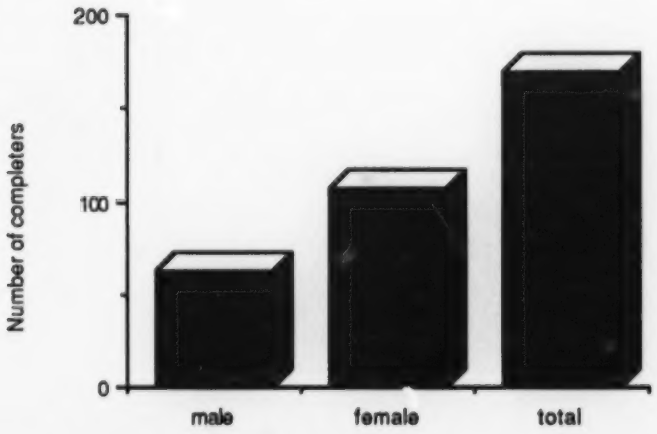
In the school year 1988-1989, the total number of secondary school completers in Vocational Education Commercial Art programs was 294. Of these completers, 52% were males and 48% were females. In past years, female enrollment has significantly out numbered male enrollment in Commercial Art programs. The figures for the year 1988-1989 show a more balanced percentage of male and female completers in Commercial Art programs. This shift may be attributed to the diversity of positions now available in this occupation which may be equally attractive to both males and females.

Job Outlook

New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 691 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 316 Commercial Art trainee completers for the program year 1989. Some of the occupational positions included in this category are artists, commercial artists, designers, detail design decorators and painters. Predicted job openings exceed the number of current trainee completers for positions in this occupational category.

COMPUTER OPERATOR

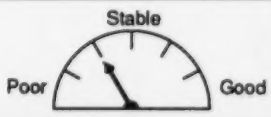
Computer Operator programs prepare individuals to monitor and control the computer console, process data prepared by programmers, load the equipment tapes, disks and paper and prepare printouts for distribution. The Vocational Education programs in this category are: business computer and console operator, and business data peripheral equipment.



New Jersey Secondary Vocational Education Completers 1988-1989

In the school year 1988-1989, the total number of secondary school completers in Vocational Education Computer Operator programs was 169. Of these completers, 37% were males and 63% were females. The high percentage of female completers may be attributed to the continued tradition of primarily employing women in this occupational category.

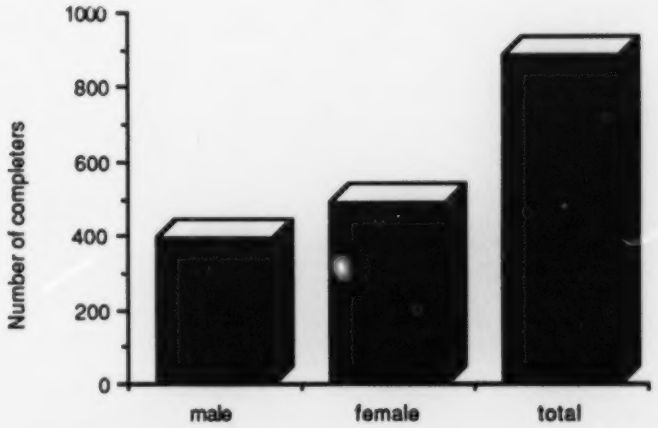
Job Outlook



New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 730 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 517 Computer Operator trainee completers for the program year 1989. Predicted job openings exceed the number of current trainee completers for positions in this occupational category.

COMPUTER PROGRAMMING

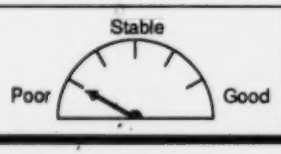
Computer Programming training prepares individuals to write the program the computer must follow to organize and process data to produce desired information. The Vocational Education programs included in this category are: business data processing, computer programming, data processing, and computer and information science.



New Jersey Secondary Vocational Education Completers 1988-1989

In the school year 1988-1989, the total number of secondary school completers in Vocational Education Computer Programming was 886. Of these completers, 45% were males and 55% were females. In past years, female enrollment has significantly out numbered male enrollment in Computer Programming. The figures for the year 1988-1989 show a narrowing of the difference in the number of male and female trainee completers in Computer Programming. This shift in recent years may be attributed to the greater acceptance of males in this occupational category than in the past.

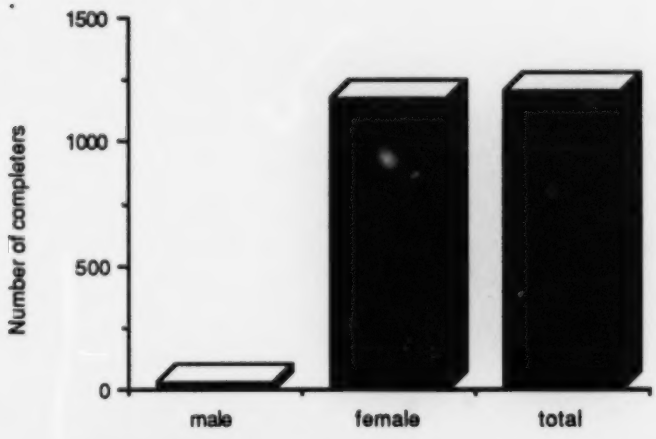
Job Outlook



New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 1,310 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 2,943 Computer Programming trainee completers for the program year 1989. Predicted job openings fall significantly short of the number of current trainee completers for positions in this occupational category.

COSMETOLOGY

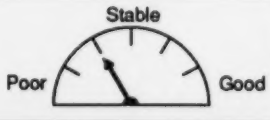
Cosmetology programs prepare individuals to perform tasks that improve the appearance of patrons, such as waving, cutting, styling and coloring hair, providing scalp and facial treatments, manicures, and other related services. The Vocational Education programs in this category are: general personal services, barbering, cosmetology and electrolysis.



New Jersey Secondary Vocational Education Completers 1988-1989

In the school year 1988-1989, the total number of secondary school completers in Vocational Education Cosmetology programs was 1,200. Of these completers, 2% were males and 98% were females. The consistently high percentage of female completers in Cosmetology programs may be attributed to the continued tradition of primarily employing women in this occupational category.

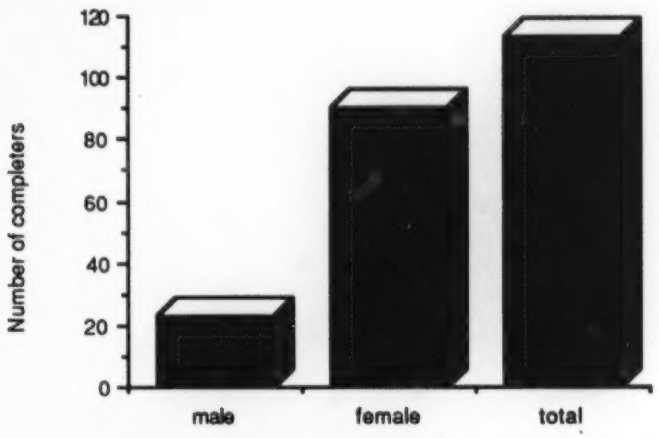
Job Outlook



New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 1,380 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 1,216 trainee completers for the program year 1989. The occupational positions included in this category are: barbers, hairdressers, manicurists, and shampooers. Predicted job openings slightly exceed the number of current trainee completers for positions in this occupational category.

DATA ENTRY KEYER

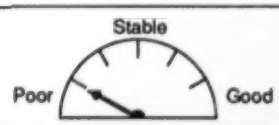
Data Entry Keyer programs train individuals to operate a keyboard to type data from documents into the computer system.



New Jersey Secondary Vocational Education Completers 1988-1989

In the school year 1988-1989, the total number of secondary school completers in Vocational Education Data Entry Keyer programs was 113. Of these completers, 20% were males and 80% were females. The consistently high percentage of female completers in Data Entry Keyer programs may be attributed to the continued tradition of primarily employing women in this occupational category.

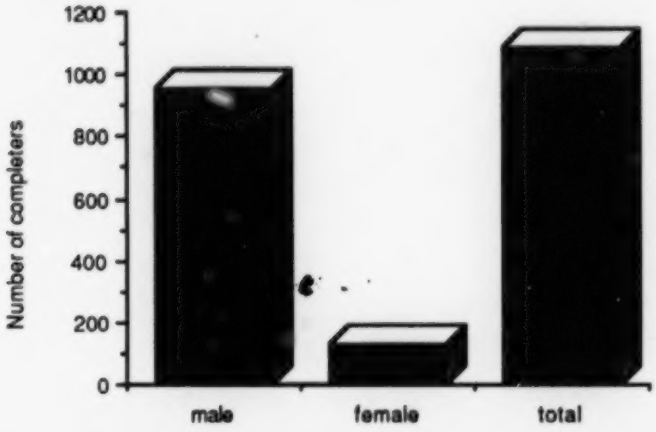
Job Outlook



New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 50 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 1,733 trainee completers for the program year 1989. Predicted job openings significantly fall short of the number of current trainee completers for positions in this occupational category.

DRAFTING AND DESIGN

Drafting and Design programs prepare individuals to design detailed drawings from engineering sketches and specifications for use as guides in manufacturing and construction. The Vocational Education programs in this category are: agricultural design and construction, drafting and design technology, mechanical design and technology, medical illustrating, architectural drafting, civil/structural drafting, electrical/electronic drafting and mechanical drafting.



New Jersey Secondary Vocational Education Completers 1988-1989

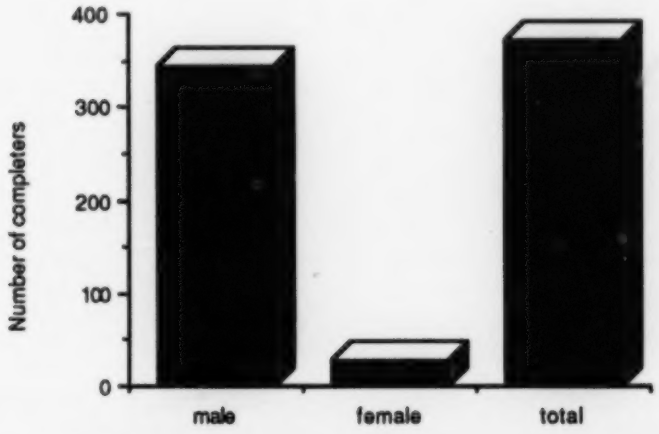
In the school year 1988-1989, the total number of secondary school completers in Vocational Education Drafting and Design programs was 1,085. Of these completers, 88% were males and 12% were females. The higher percentage of males completing training in Drafting and Design programs may be due to the continued tradition of generally employing men rather than women in this occupational category.

Job Outlook

New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 763 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 1,562 Drafting and Design trainee completers for the program year 1989. Predicted job openings significantly fall short of the number of current trainee completers for positions in this occupational category.

ELECTRICAL AND ELECTRONIC TECHNOLOGY

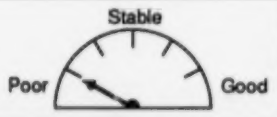
Electrical and Electronic Technology programs prepare individuals to apply theoretical knowledge and principles to test, develop, service and build electrical/electronic systems. The Vocational Education programs included in this category are: computer technology, electrical technology, electronic technology, laser electro-optic technology and other related technology.



New Jersey Secondary Vocational Education Completers 1988-1989

In the school year 1988-1989, the total number of secondary school completers in Vocational Education Electrical and Electronic Technology programs was 372. Of these completers, 93% were males and 7% were females. The significantly high percentage of males completing training in Electrical and Electronic Technology programs may be attributed to the continued tradition of generally employing men in this occupational category.

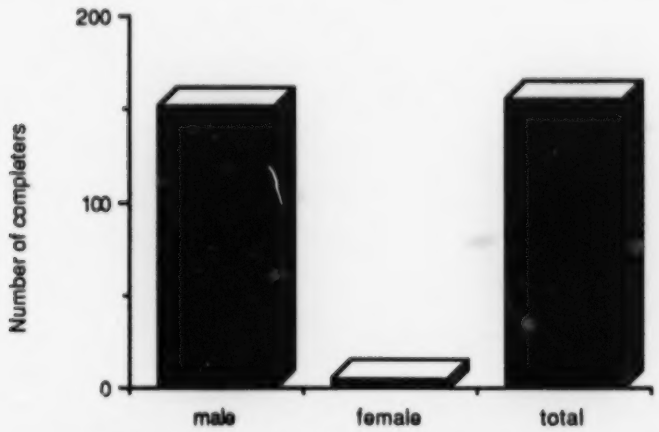
Job Outlook



New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 660 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 1,312 Electrical and Electronic Technology trainee completers for the program year 1989. The occupational positions included in this category are: electrical and electronic technicians and all other engineering technicians. Predicted job openings significantly fall short of the number of current trainee completers for positions in this occupational category.

ELECTRICAL EQUIPMENT REPAIR

Electrical Equipment Repair programs prepare individuals to repair, adjust and maintain electrical systems, wiring and equipment. The Vocational Education programs included in this category are: electrical equipment maintenance, major appliance repair, motor repair, small appliance repair and vending machine repair.



New Jersey Secondary Vocational Education Completers 1988-1989

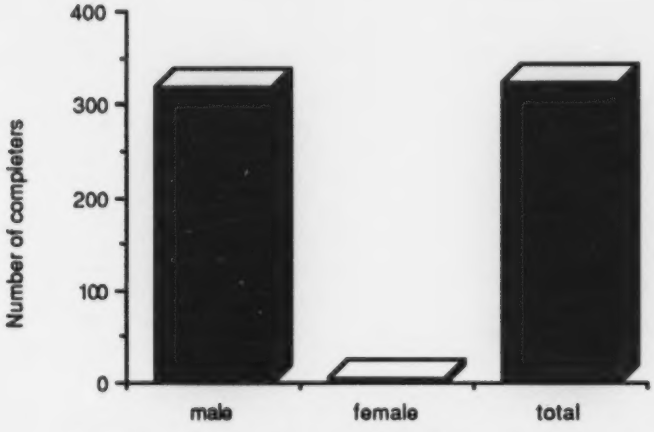
In the school year 1988-1989, the total number of secondary school completers in Vocational Education Electrical Equipment Repair programs was 156. Of these completers, 97% were males and 3% were females. The significantly high percentage of males completing training in Electrical Equipment Repair programs may be due to the continued tradition of generally employing men in this occupational category.

Job Outlook

New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 486 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 230 Electrical Equipment Repair trainee completers for the program year 1989. The occupational positions included in this category are: machinery maintenance mechanics, electric home appliance and power tool repairers, electric motor and transformer repairers, gas appliance repairers, coin and vending machine servicers and installers, and all other mechanics. Predicted job openings exceed the number of current trainee completers for positions in this occupational category.

ELECTRICIAN

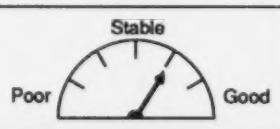
Electrician programs prepare individuals to assemble, install, maintain and repair electrical systems and fixtures. The Vocational Education programs included in this category are: electric and power transmission, electrician and lineworker.



New Jersey Secondary Vocational Education Completers 1988-1989

In the school year 1988-1989, the total number of secondary school completers in Vocational Education Electrician programs was 324. Of these completers, 98% were males and 2% were females. The very high percentage of male completers may be attributed to the continued tradition of primarily employing men in this occupational category.

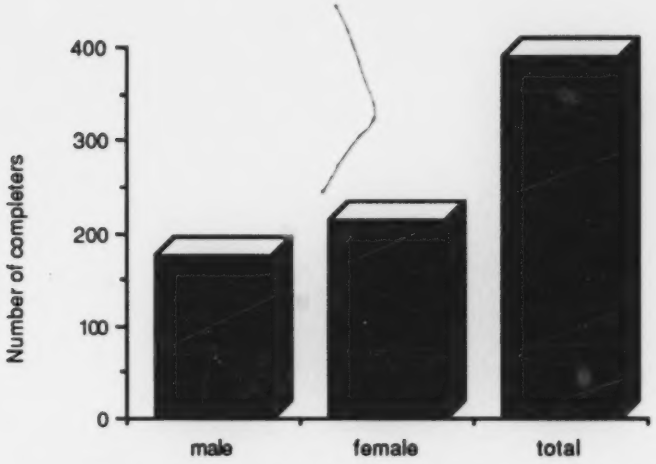
Job Outlook



New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 1,200 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 324 Electrician trainee completers for the program year 1989. The occupational positions included in this category are: telephone and cable TV line installers, electrical powerline installers, electric meter installers and repair, electricians and electric and powerline transmission helpers. Predicted job openings far exceed the number of current trainee completers for positions in this occupational category.

FOOD MANAGEMENT

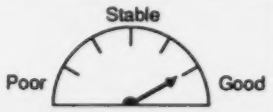
Food Management programs prepare individuals for occupations in food store management, retail and wholesale food sales and other related services. The Vocational Education programs included in this category are: food marketing, convenience store marketing and supermarket marketing.



New Jersey Secondary Vocational Education Completers 1988-1989

In the school year 1988-1989, the total number of secondary school completers in Vocational Education, Food Marketing programs was 390. Of these completers, 45% were males and 55% were females. In past years, female enrollment has significantly outnumbered male enrollment in Food Management programs. The figures for the year 1988-1989 show a more balanced percentage of male and female completers in Food Management programs. This shift may be attributed to the diversity of positions now available in this occupation which may be equally attractive to both males and females.

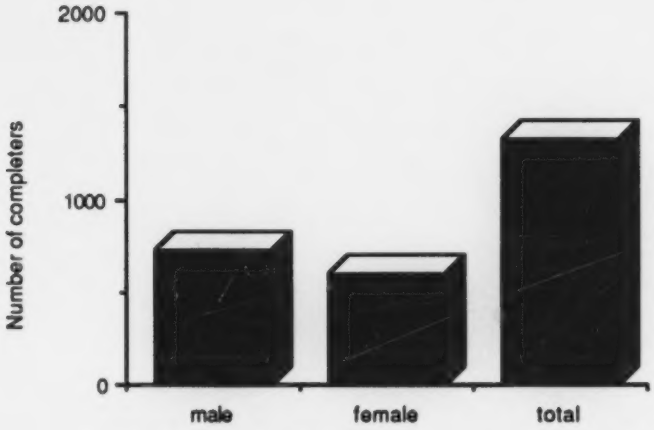
Job Outlook



New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 4,123 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 390 Food Marketing trainee completers for the program year 1989. The occupational positions included in this category are: first line supervisors and managers, sales representatives, retail salespersons, stock clerks and cashiers. Predicted job openings far exceed the number of current trainee completers for positions in this occupational category.

FOOD SERVICE

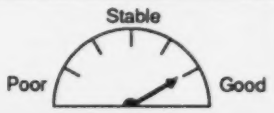
Food Service programs prepare individuals for food related occupations in restaurants, hotels, schools or other establishments. The Vocational Education programs included in this category are: restaurant management, bartending, other entertainment services, general food production, baking, chef/cook, food catering, food service and school food service.



New Jersey Secondary Vocational Education Completers 1988-1989

In the school year 1988-1989, the total number of secondary school completers in Vocational Education Food Service programs was 1,321. Of these completers, 55% were males and 45% were females. The continued higher percentage of males than females being attracted to Food Service programs may be attributed to the tradition of generally employing more men than women in this occupational category.

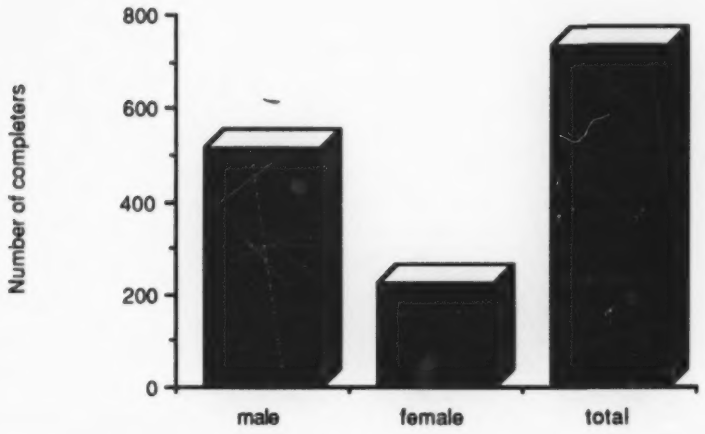
Job Outlook



New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 9,703 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 2,052 Food Service trainee completers for the program year 1989. Some of the occupational positions included in this category are: food service and lodging managers, bread and pastry bakers, restaurant cooks, short order cooks, and food preparation and service workers. Predicted job openings far exceed the number of current trainee completers for positions in this occupational category.

GRAPHIC ARTS

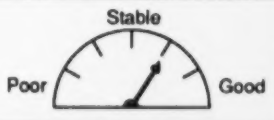
Graphic Arts programs prepare individuals to produce copies and designs by transferring ink or pigment to paper or other materials. The Vocational Education programs included in this category are: graphic and printing communications, composition, lithography and platemaking, printing press operation, silk screening and printing, design, graphic design, and graphic arts technology.



New Jersey Secondary Vocational Education Completers 1988-1989

In the school year 1988-1989, the total number of secondary school completers in Vocational Education Graphic Arts programs was 735. Of these completers, 70% were males and 30% were females. Over the years, the consistently higher number of males than females being attracted to Graphic Arts programs may be attributed to the continued tradition of employing men in this occupational category.

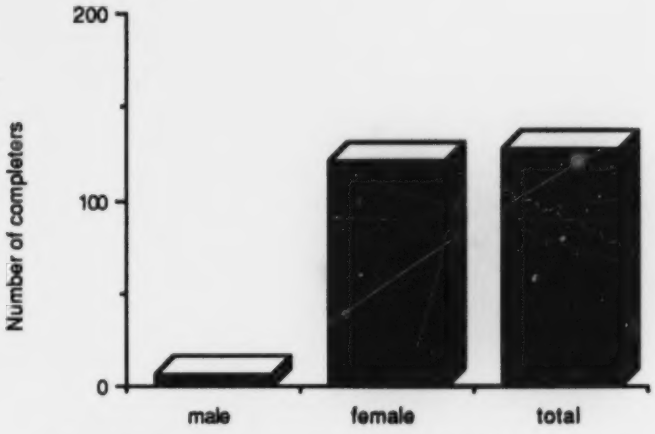
Job Outlook



New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 2,115 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 799 Graphic Arts trainee completers for the program year 1989. Some of the occupational positions included in this category are: compositors, typesetters and arrangers, job printers, lithograph and photoengraving workers and printing press setters. Predicted job openings far exceed the number of current trainee completers for positions in the occupational category.

HEALTH AIDE

Health Aide programs prepare individuals to assist health care professionals in the care of the physically ill and infirm. The Vocational Education programs included in this category are: home health aide, geriatric aide, nursing assisting and pediatric aide.



New Jersey Secondary Vocational Education Completers 1988-1989

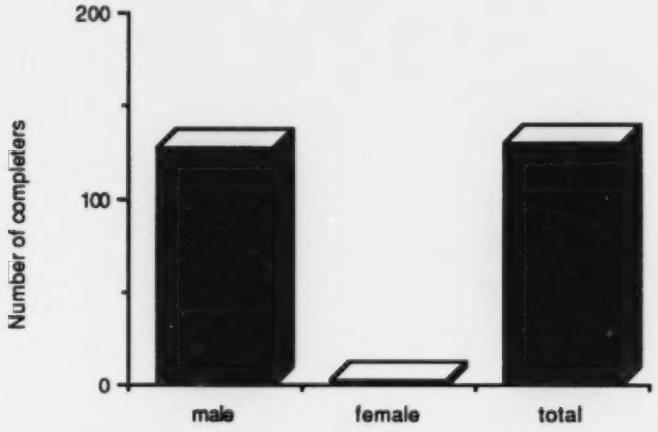
In the school year 1988-1989, the total number of secondary school completers in Vocational Education Health Aide programs was 128. Of these completers, 5% were males and 95% were females. Over the years, the consistently higher number of females than males being attracted to Health Aide programs may be attributed to the continued tradition of employing women in this occupational category.

Job Outlook

New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 2,864 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 283 Health Aide trainee completers for the program year 1989. Some of the occupational positions included in this category are: nursing aides, orderlies and attendants, and home health aides. Predicted job openings far exceed the number of current trainee completers for positions in this occupational category.

HEATING AND COOLING MECHANICS

Heating and Cooling Mechanics programs prepare individuals to use a variety of tools to install, service and repair heating and air conditioning systems. The Vocational Education programs included in this category are: air conditioning, heating and refrigeration.



New Jersey Secondary Vocational Education Completers 1988-1989

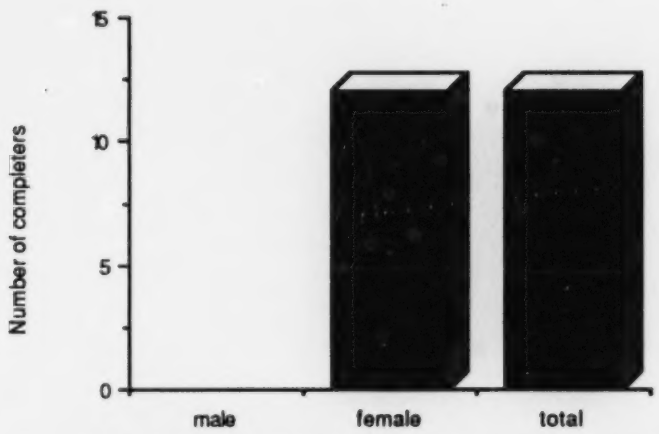
In the school year 1988-1989, the total number of secondary school completers in Vocational Education Heating and Cooling Mechanics programs was 130. Of these completers, 98% were males and 2% were females. Over the years, the consistently higher number of males than females being attracted to programs in Heating and Cooling Mechanics may be attributed to the continued tradition of employing men in this occupational category.

Job Outlook

New Jersey Occupational Information Coordinating Committee statistics an average annual job openings for the year 1989 show that approximately 420 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 557 Heating and Cooling Mechanics trainee completers for the program year 1989. Some of the occupational positions included in this category are: heating, air conditioning and refrigeration mechanics. Predicted job openings fall short of the number of current trainee completers for positions in this occupational category.

LICENSED PRACTICAL NURSE

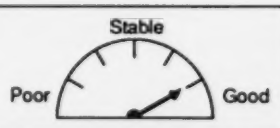
Licensed Practical Nurse programs prepare individuals to care for the physically ill and infirm under the supervision of registered nurses and physicians.



New Jersey Secondary Vocational Education Completers 1988-1989

In the school year 1988-1989, the total number of secondary school completers in Vocational Education Licensed Practical Nurse programs was 12. All 12 of these completers were females. Lack of males in Licensed Practical Nurse programs may be attributed to the tradition of generally employing women in this occupational category.

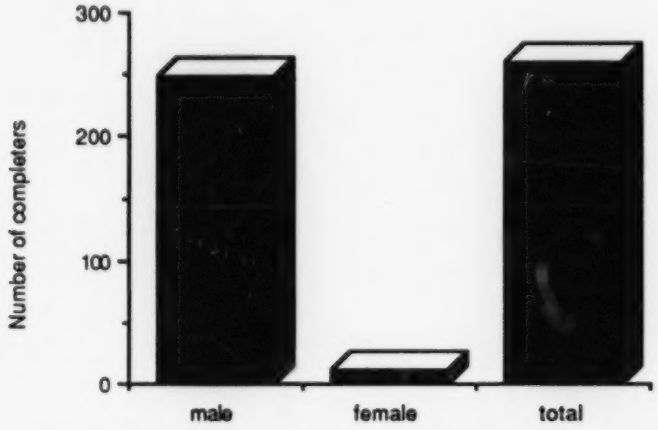
Job Outlook



New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 1,020 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 59 Licensed Practical Nurse trainee completers for the program year 1989. Predicted job openings far exceed the number of current trainee completers for positions in this occupational category.

MACHINIST

Machinist programs prepare individuals to produce precision metal parts for industrial machinery, instruments, aircraft and other goods. The Vocational Education programs included in this category are: precision metal work, machine tool operation and tool and die making.



New Jersey Secondary Vocational Education Completers 1988-1989

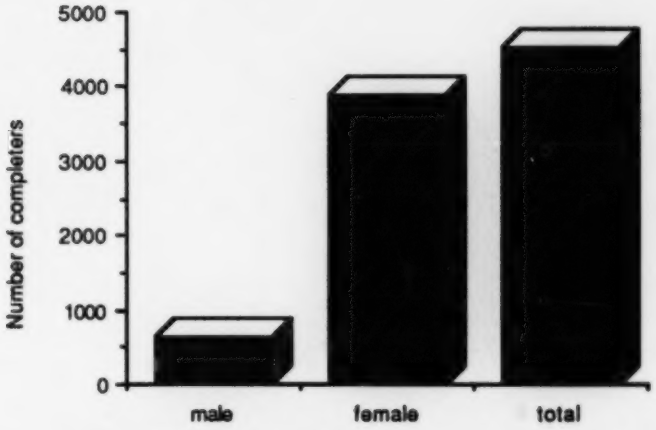
In the school year 1988-1989, the total number of secondary school completers in Vocational Education Machinist programs was 260. Of these completers, 96% were males and 4% were females. The very low percentage of female completers may be attributed to the tradition of generally employing men in this occupational category.

Job Outlook

New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 3,429 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 263 Machinist trainee completers for the program year 1989. Some of the occupational positions included in this category are: tool and die makers, precision instrument makers, machinists, tool grinders, filers, sharpeners and combination machine tool operators and tenders. Predicted job openings far exceed the number of current trainee completers for positions in this occupational category.

OFFICE OCCUPATIONS

Office Occupations programs prepare individuals to preform secretarial and clerical office duties for the maintenance of organizational efficiency, to take shorthand by stenotype machine or hand and to transcribe on a typewriter or word processor. Some of the Vocational Education programs included in this category are secretarial and related programs, stenography, word processing, typing and general office clerical work.



New Jersey Secondary Vocational Education Completers 1988-1989

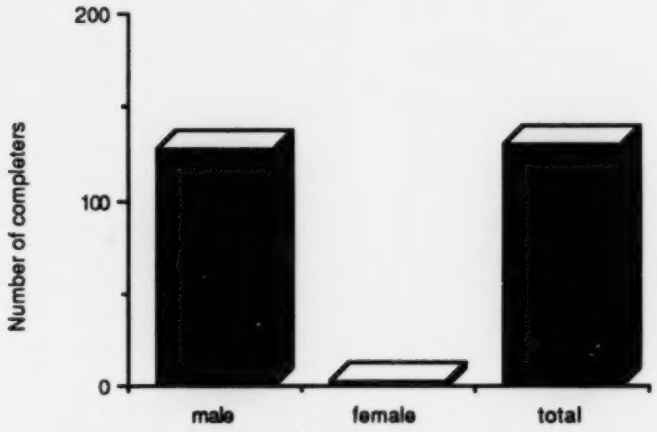
In the school year 1988-1989, the total number of secondary school completers in Vocational Education Office Occupations programs was 4,533. Of these completers, 14% were males and 86% were females. The significantly high percentage of females completing training in Office Occupations programs may be due to the continued tradition of generally employing women in this occupational category.

Job Outlook

New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 18,696 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 7,247 Office Occupations trainee completers for the program year 1989. Some of the occupational positions included in this category are: secretaries, stenographers, clerks, typists, word processing typists and office machine operators. Predicted job openings far exceed the number of current trainee completers for positions in this occupational category.

PLUMBING

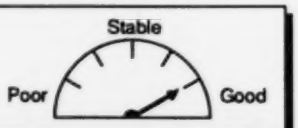
Plumbing programs prepare individuals to assemble, install, and repair pipes, fittings and fixtures for heating, water, drainage and gas systems. The Vocational Education programs included in this category are: plumbing, pipefitting and steamfitting.



New Jersey Secondary Vocational Education Completers 1988-1989

In the school year 1988-1989, the total number of secondary school completers in Vocational Education Plumbing programs was 130. Of these completers, 98% were males and 2% were females. The consistently higher number of males than females being attracted to Plumbing programs may be attributed to the continued tradition of employing men rather that women in this occupational category.

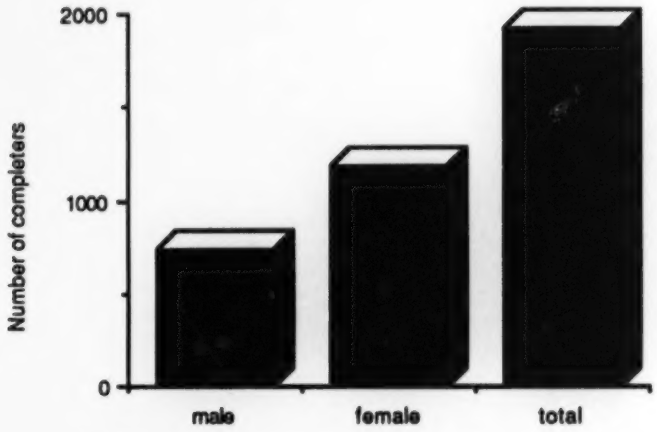
Job Outlook



New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 910 positions are available each year in this category. These same statistics including secondary, college and private vocational schools, also show a total of 130 Plumbing trainee completers for the program year 1989. Some of the occupational positions included in this category are: plumbing, pipefitters, steamfitters, pipelaying fitters, sewer pipe and septic tank services, and plumbing helpers. Predicted job openings far exceed the number of current trainee completers for positions in this occupational category.

SALES AND PURCHASING, GENERAL

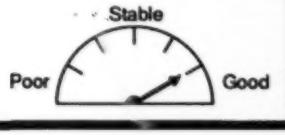
Sales and Purchasing General programs prepare individuals to purchase wholesale and distribute merchandise to retail buyers and stores who sell directly to the consumer. Some of the Vocational Education programs included in this category are: marketing management, marketing research, display, industrial sales, international marketing, purchasing, retailing, sales and wholesaling.



New Jersey Secondary Vocational Education Completers 1988-1989

In the school year 1988-1989, the total number of secondary school completers in Sales and Purchasing General was 1,927. Of these completers, 39% were males and 61% were females. The higher percentage of female completers may be attributed to the tradition of primarily employing women in this occupational category.

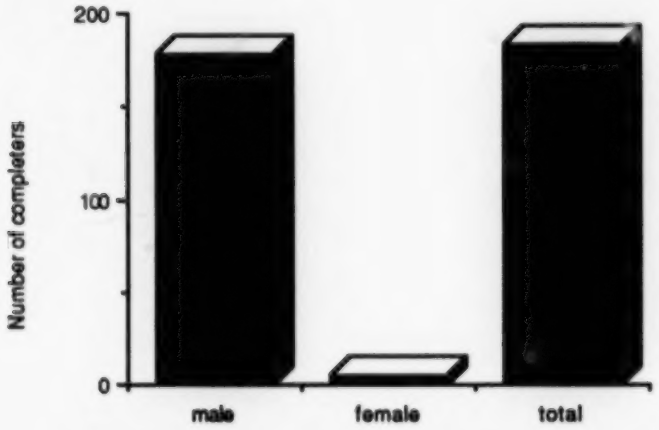
Job Outlook



New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 22,728 positions are available each year in this category. These same statistics, including secondary, college and private vocational schools, also show a total of 2,954 Sales and Purchasing General trainee completers for the program year 1989. Some of the occupational positions included in this category are: purchasing managers, agents and buyers, merchandise displayers and window trimmers, sales representatives, vendors, solicitors and related workers, demonstrators, promoters and models and all other sales and related workers. Predicted job openings far exceed the number of current trainee completers for positions in this occupational category.

WELDING

Welding programs prepare individuals to weld metal parts together using gas or arc welding equipment to construct or repair products. The Vocational Education programs included in this category are; welding technology, welding, brazing, and soldering.



New Jersey Secondary Vocational Education Completers 1988-1989

In the school year 1988-1989, the total number of secondary school completers in Vocational Education Welding programs was 183. Of these completers, 97% were males and 3% were females. The significantly high percentage of males completing training in Welding programs may be due to the continued tradition of generally employing men in this occupational category.

Job Outlook

New Jersey Occupational Information Coordinating Committee statistics on average annual job openings for the year 1989 show that approximately 640 positions are available each year in this category. These same statistics including secondary, college and private vocational schools, also show a total of 324 Welding trainee completers for the program year 1989. The occupational positions included in this category are: welding machine setters, set-up operators and tenders, soldering and brazing machine setters and operators, welders and cutters, solders and brazers. Predicted job openings exceed the number of current trainee completers for positions in this occupational category.

Summary

The 1988-1989 Vocational Education data on completers (secondary) of various vocational programs do not show any significant trends toward increasing the number of females obtaining training in traditionally male occupational areas or vice versa. Changes are evident in a number of programs which may indicate an increasingly positive outlook for more equitable training opportunities. It is important to highlight those areas where nontraditional enrollment has occurred without ignoring the occupational areas where change is still needed.

Occupational fields with the greatest predicted job openings in relationship to trainees, based on New Jersey Occupational Information Coordinating Committee statistics include:

- Bank Clerk
- Bookkeeping and Accounting
- Building Maintenance
- Cabinet Making and Furniture Making
- Child Care Worker
- Clothing Manufacturing
- Commercial Art
- Electrician
- Food Marketing
- Food Service
- Graphic Arts
- Health Aide
- Licensed Practical Nurse
- Machinist
- Office Occupations
- Plumbing
- Sales and Purchasing, General

Jobs in which the number of projected openings are approximately equal to the number of trainees are:

- Automotive Body Repair
- Carpentry
- Computer Operator
- Cosmetology
- Electrical Equipment Repair
- Welding

Programs in which trainees exceed job market demands include:

- Automotive Mechanic
- Computer Programming
- Data Entry Keyer
- Drafting and Design
- Electrical and Electronic Technology
- Heating and Cooling Mechanic

Following are the categories that traditionally employ males and have shown little change toward nontraditional enrollment in vocational education programs:

- Automotive Body Repair
- Automotive Mechanic
- Building Maintenance
- Cabinet Making and Furniture Making
- Carpentry
- Drafting and Design
- Electrical and Electronic Technology
- Electrical Equipment Repair
- Electrician
- Heating and Cooling Mechanic
- Machinist
- Plumbing
- Welding

Male completers in the above vocational programs significantly outnumber female completers.

Following are the categories that traditionally employ females and have shown little change toward nontraditional enrollment in vocational education programs:

- Bank Clerk
- Child Care Worker
- Clothing Manufacturing
- Cosmetology
- Data Entry Keyer
- Health Aide
- Licensed Practical Nurse
- Office Occupations

Female completers in the above vocational programs significantly outnumber male completers.

Following are the categories in which male and female completers of vocational education programs are fairly comparable:

- Bookkeeping and Accounting
- Commercial Art
- Computer Programming
- Food Marketing
- Food Service

As evidenced by vocational education program completer figures, **strong stereotypes** still exist in most technical fields. Vocational educators can be effective in breaking down these stereotypes by ensuring that **all** students are made aware of **all** available opportunities for career exploration. Vocational educators have an obligation to be instrumental in the removal of any barrier which prevents the realization of human potential.